

'Great Wall of Pecos' sound wall planned for freeway

[By Doug Murphy | AFN](#)

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They haven't been designed, but already the 12 miles of 10- to 20-foot-tall sound walls that will be built in conjunction with the Loop 202 Freeway have a name: "The Great Wall of Pecos."

That's because the sound walls to protect the neighborhood from traffic noise will also create a giant barrier to the south, which didn't make several members of the South Mountain Citizens Advisory Team very happy.

And even with tall sound walls to mitigate the noise, traffic will still be heard.

"You are going to hear it, especially large trucks and motorcycles," said Fred Garcia, a sound expert with the Arizona Department of Transportation. "When we talk about mitigation we aren't talking about elimination, that would be impossible."

In Arizona, mitigation must be considered when the average noise level hits 63 decibels. To put that into perspective, a library is around 30 dBA, a quiet neighborhood is 50 dBA and a garbage disposal 80 dBA.

Garcia said that while ADOT has begun to monitor noise along Pecos Road and the rest of the projected route of the Loop 202, he can't make any definitive decisions about mitigation until design of the freeway has progressed because small changes in elevation can make a big difference in how far noise travels.

"There's no way we could tell you there will be a 20-foot wall or a 10-foot wall, we don't even have (freeway construction) plans," Garcia said.

But what is known is that, generally speaking, ADOT doesn't build sound walls shorter than 10 feet or usually much over 20 feet above the freeway surface.

A 2000 study by the city of Phoenix, which at the time was contemplating extending Pecos Road as a parkway around South Mountain Park to connect with 51st Avenue in the west, estimates that noise would significantly jump near Pecos Road from 50 to 60 dBA in 2000 during rush hour to 65 to 75 dBA if a freeway were constructed without a sound wall, rubberized asphalt or any other mitigators.

Building the freeway below grade would help reduce the height of the sound walls needed, Garcia said under questioning by the South Mountain Citizens Advisory Team, but wouldn't completely eliminate the need for a wall.

The Federal Highway Administration has specific sound levels for different activity areas above which they require consideration of noise abatement. One category is parks where action should be taken when the noise levels reach 67 dBA. But current plans don't call for a wall where the freeway cuts through South Mountain Park.

"I think it's a little irresponsible to leave it as a blank when there is a category for it," said Laurel Arndt, who represents the Ahwatukee Foothills Village Planning Committee on the advisory team.

Garcia said that building a wall next to the freeway through the park will be studied, but that

construction has to be "feasible and reasonable."

Planners are in a bind because tall walls will probably be needed to reduce the noise for homes near the freeway, but that due to the "Cathedral Effect," will have little impact on homes that are above the freeway on slopes of South Mountain because of how sound carries. Building the freeway below grade could cost \$500 million more and require the elimination of 800 homes instead of 317 under the current plan because of the need to build traditional water retention ponds to deal with runoff that would have to pass over the freeway.

The freeway is over the original \$1.1 billion budget by \$600 million, with a new construction estimate expected in September.

For more information, visit www.azdot.gov/valleyfreeways.

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